MANUFACTURING EXTENSION PARTNERSHIP

MAKING A DIFFERENCE FOR AMERICA'S MANUFACTURERS

The NIST Manufacturing Extension Partnership is a nationwide system of resources, transforming manufacturers to compete globally, supporting greater supply chain integration, and providing access to technology for improved productivity. At the heart of MEP are manufacturing extension centers locally positioned throughout the U.S. and Puerto Rico to address the critical and often unique needs of America's manufacturers.

NIST
National Institute of Standards and Technology
Technology Administration, U.S. Department of Commerce

"…MEP is a valuable resource for small manufacturers...This resource gives small manufacturers on-target solutions and immediate fixes that allow them to compete effectively with their larger counterparts."

Gowher Rizvi, Director of the Ash Institute for Democratic Governance and Innovation at the John F. Kennedy School of Government at Harvard University

Small Manufacturers: The Foundation of American Industry

Manufacturing creates wealth for our nation: wealth in the form of economic growth, increased jobs and robust trade in world markets. Productivity improvements by U.S. manufacturers are leading the nation. *Between 1992 and 2004, manufacturing productivity grew at nearly double the rate of the entire economy: manufacturing productivity rose by 63 percent compared to a 34 percent increase for the non-farm business sector. **Approximately 350,000 small manufacturers account for over half the total value of U.S. production and represent 98.4 percent of all manufacturing establishments. They employ over 10 million people and account for 70 percent of all U.S. manufacturing employment. *These jobs are high-skilled and high-wage, with manufacturing employees earning 36 percent more than retail employees per hour.

The Challenge for Small Manufacturers: Bridging the Productivity Gap

As critical as small manufacturers are to the economy, the productivity gap between large and small firms is widening. **Between 1992 and 2002, productivity for large manufacturers grew by 24.5 percent versus 19 percent for small manufacturers. And, as large manufacturers increase their dependence on suppliers for parts and services, the performance and capabilities of small manufacturers become even more critical to the competitiveness of all manufacturers and to the health of the U.S. economy, Yet, according to a National Research Council report, "Many of these small firms, however, are operating far below their potential. Their use of modern manufacturing equipment, methodologies and management practices is inadequate to ensure that American manufacturing will be globally competitive."

Limited budgets, lack of in-house expertise, and lack of access to the newest technologies are but a few of the significant barriers faced by small manufacturers – barriers that they can overcome by working with MEP.

* Bureau of Labor Statistics
**U.S. Census Bureau

How MEP is Making a Difference

MANUFACTURING EXTENSION CENTERS

MEP is a national system of affiliated manufacturing extension centers and field offices located throughout all 50 states and Puerto Rico. Created in 1988, today's system delivers services to firms across the country and in Puerto Rico. Centers are funded by federal, state, local and private resources to serve small manufacturers.

Each center works directly with area manufacturers to provide expertise and services tailored to their most critical needs, which range from lean manufacturing and worker training to business practices and implementation of technology innovations. MEP provides the solutions manufacturers need utilizing the expertise of both center staff and outside consultants. Centers often work with small firms to overcome barriers in locating and obtaining private-sector resources.

PARTNERSHIPS

MEP provides manufacturers with access to a wealth of tools, techniques and other resources through thousands of public and private affiliations. Initiatives with the U.S. Departments of Labor and Defense, EPA, SBA, National Association of State Development Agencies, the State Science and Technology Institute, the National Association of Manufacturers, state and local employment training organizations and hundreds of universities and community colleges are a few examples of how MEP leverages public and private resources to make a comprehensive range of technical services available to small manufacturers.

Each year, MEP collaborates with thousands of manufacturers to solve problems, to increase productivity and to achieve higher profits. Through continuous assessment and improvement of our products, services and service-delivery approaches, MEP is committed to meeting the strategic needs of manufacturers in today's globally competitive market.

For More Information

For a list of centers and other information about MEP, contact:

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Gaithersburg, MD 20899-4800
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FAX: (301) 963-6556
E-mail: mfg@nist.gov
Or visit our website at www.mep.nist.gov

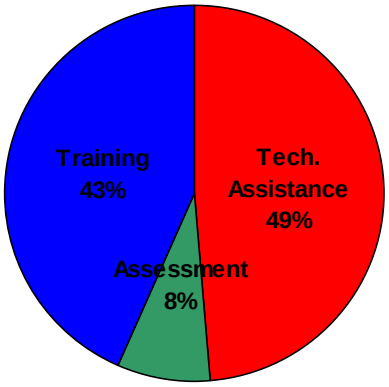
Phone 800-MEP-4MFG for the center serving your area

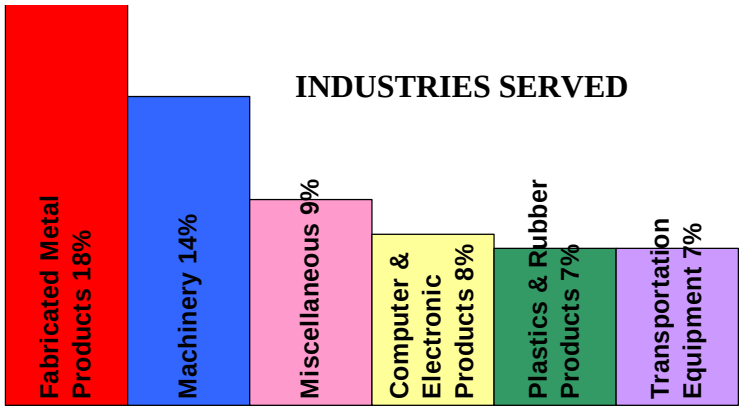
RESULTS: WHAT THE DATA SHOW

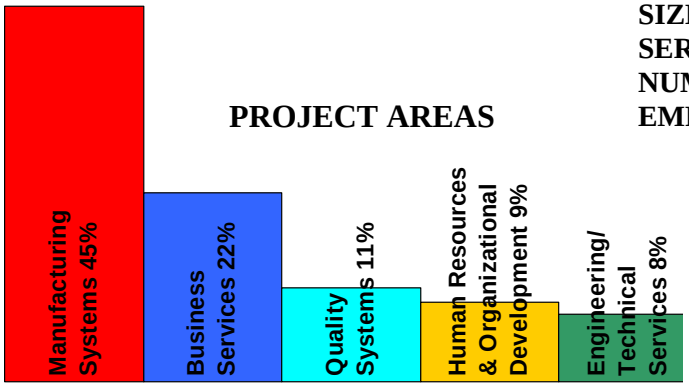
16,448 Manufacturers served in FY2005

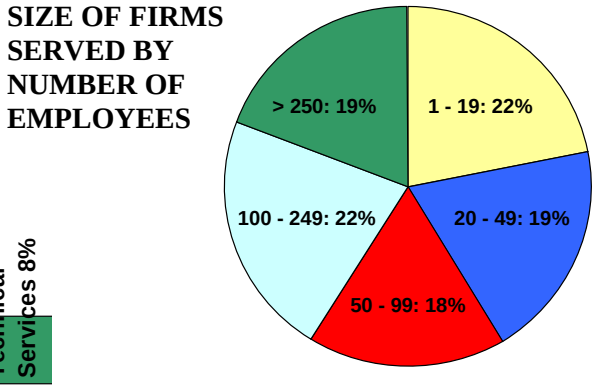
MEP has completed over 310,000 customer engagements since the program's inception including technical assistance projects, training programs, networking events and long-term strategic support.

FY2005 activity data derived from reports on 20,668 engagements with over 16,448 client firms.









FY2004* MEP CLIENT IMPACTS AS A DIRECT RESULT OF MEP ACTIVITIES

Increased/Retained Sales		**$4.532 billion**
New Sales	**$1.889 billion**	
Retained Sales	**$2.643 billion**	
Cost Savings		**$721 million**
New Client Investment in Modernization		**$941 million**
Jobs Created		**12,753**
Jobs Retained		**30,871**

**Independent follow-up of clients with projects completed in FY2004. Of the 5,245 clients selected to be surveyed, 4,644 completed the survey in FY2005. Measures are a conservative snapshot of benefits. Recurring or cumulative benefits may be larger.*

IMPACT: INDEPENDENT STUDIES

Systematic evaluation studies have confirmed that the MEP is having a positive effect on businesses and the economy…has achieved national coverage and established local service partnerships…and most important…MEP services are leading to desired business and economic goals…"

Philip Shapira, Ph.D., Georgia Tech University[1]

Benefits to GA Manufacturers

Georgia MEP clients surveyed reported manufacturing benefits in the following areas:

- Improvements to an existing process
- Improvements in management skills
- Improvements in employee skills
- Improvements in an existing product or service

Furthermore, comparing Georgia MEP clients with non-clients found that working with the Georgia MEP increased the value-added of the average client plant by up to nearly $1,000,000 between 2002 and 2004.[2]

PA Manufacturers Post Positive Productivity Gains

A study of Pennsylvania's Industrial Resource Centers (IRC) found that the program boosted the labor productivity of IRC clients by an average of between 3.6 and 5.0 percentage points per year. The study found that these productivity gains raised gross state products by about $1.9 billion. Finally, the study found that for every state dollar invested in the program, the program generated almost $22 of additional income to the state economy.[3] In 2004, Deloitte Consulting, LLP was asked to conduct a vigorous independent analysis of IRC performance and impact on the Pennsylvania economy. Deloitte found that previous assessments of IRC impact, most recently in 1999, have been sustained, even in very challenging conditions during the years between 1999 and 2003.[4]

Higher Productivity Growth for MEP Clients

Researchers at The Center for Economic Studies, U.S. Census Bureau, found that manufacturing extension clients experienced between 3.4 and 16 percent more growth in labor productivity over a five-year period than similar non-client firms. The productivity growth of the 1,559 firms studied translates into $484 million in additional value-added at client firms.[5]

Based on these results, a second study estimated that this value-added increase translates into $1.3 billion in additional economic output over 5 years, leading to $213 million in additional federal revenues and a $4.47 increase in real disposable income per capita.[6]

Value-Added Income and Jobs for NY

A New York Manufacturing Extension Partnership study found that the state's $5.3 million investment in the program between July 1995 and March 1997, combined with the federal investment, generated an additional $227 million of value-added income in New York State. This growth, in turn, led to the creation of 2,600 jobs.[7]

GAO Survey Positive

An independent survey of MEP clients by the General Accounting Office found MEP had a positive effect on a firm's performance in the areas of: [8]

- profits
- sales
- product quality
- workplace technology
- worker productivity
- customer satisfaction

Multiplier Impacts on the Alabama State Economy

Between 1997 and 2000, the Alabama Technology Network (ATN) helped its clients increase sales by $205 million, create or retain 2,434 jobs, create additional investment of $53 million, and save $10 million in material and labor costs (Source: ATN).

An Auburn University study found that these impacts generated the following additional impacts on the Alabama state economy.[9]

	Total Impact
Output	$324 million
Jobs	6200
Earnings	$173 million

Sources

1. "*Issues in Science and Technology"*, Spring 1998, "Extending Manufacturing Extension," Philip Shapira, Ph.D

2 Georgia Tech Policy Project on Industrial Modernization, December 2005

3 "The Pennsylvania Industrial Resource Center: Assessing the Record and Charting the Future," by Nexus Associates, Inc. for the Ben Franklin/IRC Partnership Board. October 1999.

4."*Manufacturing Pennsylvania's Future: Regional Strategies that Build from Current Strengths and Address Competitive Challenges*," for the Industrial Resource Centers (IRCs) of Pennsylvania, Department of Community and Economic Development, Commonwealth of Pennsylvania and Team PA Foundation, January 2004.

5 *Journal of Policy Analysis and Management*, "Evaluating the Impact of Manufacturing Extension on Productivity Growth," by Ronald S. Jarmin, Winter 1999.

6 "Estimating Economic Impacts of Government Technology Programs: Manufacturing Studies Using the REMI Model," by M.A. Ehlen and S.F. Weber, economists for the National Institute of Standards and Technology, 1997.

7 "Evaluation of the New York Manufacturing Extension Partnership," by Nexus Associates for New York State Science and Technology Foundation/Empire State Development, 1997.

8 "Manufacturing Extension Programs: Manufacturers' Views of Services," U.S. General Accounting Office, Report GAO/GGK-95-216BR, August 1995.

9 "Estimated Economic Impact of the Alabama Technology Network on the State of Alabama (1997-2000)," Dr. Keivan Deravi, Professor of Economics at Auburn University in Montgomery, 2002.